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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/528,797 | 03/23/2005 | Chrystelle Langlais | 21029-00288-US1 | 9162 |

30678 7590 11/29/2005

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| EXAMINER |
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BARRY, CHESTER T

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| ART UNIT | PAPER NUMBER |
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1724

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/528,797

Applicant(s)

LANGLAIS ET AL.

Examiner

Chester T. Barry

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1 and 2 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 23 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/23/05.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claims 1- 2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 appears to be drawn to a method comprising processing a waste water stream in a bioreactor, dewatering sludge from the bioreactor, and recycling the liquid effluent from the dewatering step back to the head (most upstream portion?) of the bioreactor. It is not clear whether the claimed invention requires addition of a polyelectrolyte to any stream of the process, and, if so, to which one. To the sludge during dewatering? Is this step a "sludge conditioning step"?

The claim states that "the residual content, in [the liquid] effluent [from the dewatering step] of polyelectrolyte used to condition the [biological] sludge during the dewatering step moves toward the biological sludge." The meaning of moving a polyelectrolyte residue "towards" a sludge cannot be understood. What is a polyelectrolyte residue? And how does one effect its movement towards a sludge? In addition to a presumed polyelectrolyte addition step, is there a re-application step?

It is not clear whether the recitation of "the biological sludge is separated from the liquid effluent" points to a separation step that is separate and distinct from the dewatering step, or if these words merely state the result that comes from the dewatering step effecting the liquid / sludge separation.

It is not clear whether the step of recycling the liquid effluent to the head of the bioreactor (see claim 1 line 3) is the same step as the recycling of "polyelectrolyte-free liquid effluent" to the head of the bioreactor.

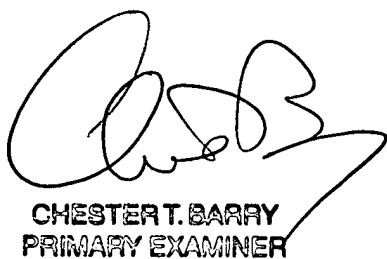
It is not clear if the "polyelectrolyte-loaded biological sludge" that is sent to the dewatering step originates directly from the bioreactor, or if the bioreactor contents is first sent to the clarifier to produce a sludge stream that is subsequently fed to the dewatering step.

In claim 2, "significantly lower" is indefinite because no standard for distinguishing an insignificant reduction from a substantial one is provided in the application.

Claims 1 – 2 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by USP 6872312.

Claims 1 – 2 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by USP 5087378.

Claims 1 – 2 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by JP 11-057799 or WO 98/49108



CHESTERT T. BARRY
PRIMARY EXAMINER

571-272-1152